

# ACHIEVE HIGHER AVAILABILITY AT LOWER COSTS FOR JAVA

PREDICTABLE SCALABILITY BY REDUCING STARTUP AND WARMUP TIMES OF JAVA WORKLOADS TO NEAR ZERO

Traditional enterprise Java applications typically require several seconds to start up and dozens of minutes to reach peak performance. This makes it challenging to scale services, often resulting in:

- **Challenges in resource planning** leading to either overplanning or underplanning.
- **Overspending** on larger instances.
- **Wasting the budget** on CPU cycles during warmup periods.
- **Losing users** due to high service latency.



## WITH COORDINATED RESTORE AT CHECKPOINT, SCALING YOUR JAVA WORKLOADS BECOMES EASY AND COST-EFFICIENT

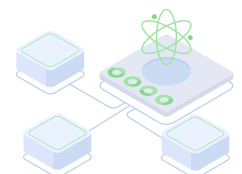
Leveraging Alpaquita Linux and Liberica JDK 17 or 21 with the Coordinated Restore at Checkpoint (CRaC) API support, you can make your instances start up at peak performance and without the memory overhead.

Warm up a test instance or take a running one.



Perform the checkpoint, saving the application state to a file.

Multiple the file among cloud instances.



That's it! You've replicated living application copies with a couple of clicks.

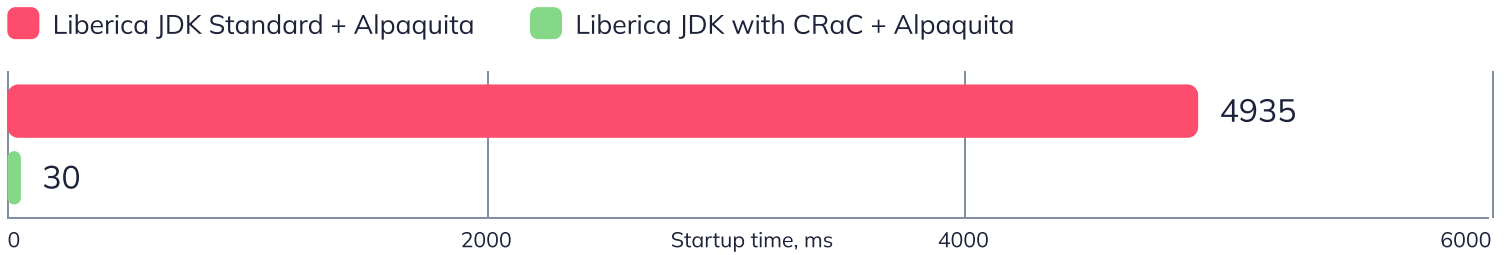
## LESS TIME, MORE CLIENTS

CRaC reduces the time for starting up Java workloads and warming them up, bringing it to mere milliseconds. Thus, you can process more client requests.

## HIGHER AVAILABILITY

No time is wasted on warm-up periods. Instances can process requests at the highest rate immediately upon startup.

### Spring Boot Petclinic Startup Study: 164x times better startup



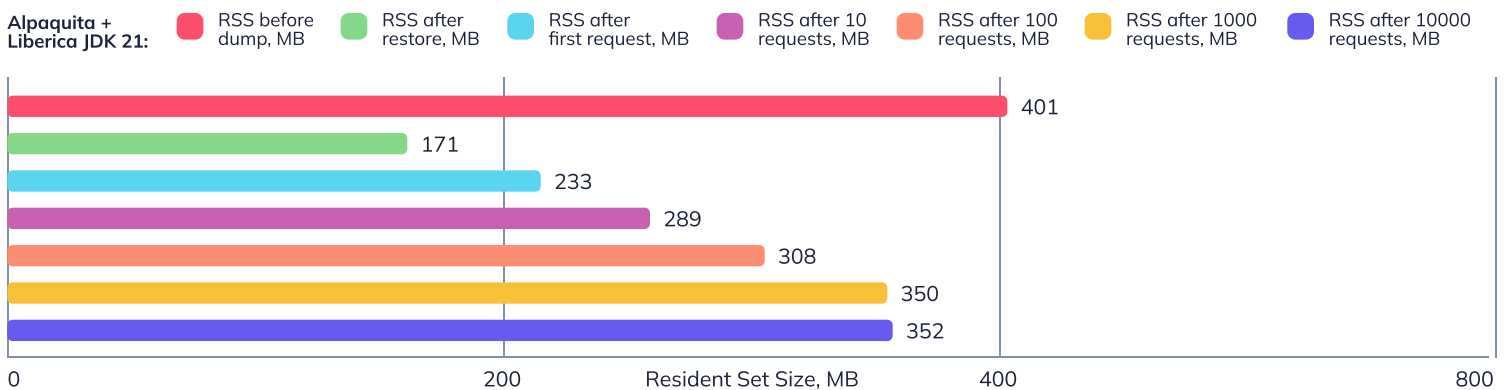
## PREDICTABLE SCALING

Add exactly as many instances and as much memory as you need to run your Java services as the load increases. No need to allocate extra resources for starting up or warming up Java.

## DECREASED COSTS

With CRaC, you can predictably scale your workloads and utilize them to their fullest capacity without overplanning CPU and memory usage, resulting in lower cloud costs.

### Spring Boot Petclinic Footprint Study: 1.1x times smaller image after restore (RSS – Resident Set Size)




## CONVENIENT INTEGRATION

BellSoft offers ready-to-use container images featuring Alpaquita Linux and Liberica JDK with CRaC support. Save yourself time on building and configuring a container image with CRaC from scratch.

 Liberica JDK is an OpenJDK distribution developed by BellSoft. Trusted by leading ISVs. Recommended by the Spring team.


## RELIABLE SOLUTION WITH VENDOR SUPPORT

BellSoft offers top-tier support for the OS and Java runtime with CRaC support, ensuring comprehensive assistance to resolve any production issues.

 Alpaquita is the only Linux distro optimized for Java. Based on Alpine, it offers implementation for both optimized musl and glibc, along with numerous performance optimizations, and LTS releases.

## WANT TO FIND OUT MORE? | CONTACT US!

 111 North Market Street, Suite 300, San Jose, CA 95113

 +1 (702) 2135959

 [info@bell-sw.com](mailto:info@bell-sw.com)

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